## Humanitarian Assistance: Introduction to Key Topics

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## **Key Topics**

- Definitions
- Malnutrition and mortality
- Sanitation and public health
- Different Rules
  - Joint operations, NGOs
  - Limited resources, many patients
  - Different environments & cultures

## Humanitarian Emergency

- Acute Event
- Large Population
- Disruption or Displacement
- Basic needs can't be met by the population or its government

## Types of emergencies

- Natural disasters
  - More concentrated populations increase magnitude of risk
- Technological disasters
  - Risk of NBC use increasing
- Complex Emergency
  - Conflict or civil strife
  - Displaced persons/refugees

## Natural disasters

#### Hurricanes

### Earthquakes





## Technological Disasters

#### Chernobyl



#### **OK City Bombing**



## Complex Emergencies



**Kosovo** 

#### Refugee:

- •flees own country due to war, or persecution
- Protection by UN, internation

#### Internally displaced pe

- Leaves home but stays within
- Has less protection under lav
- Harder to assist

## Effects of Disasters

#### Unique to each, but consider:

- Loss of shelter
  - Earthquakes, hurricanes
- Inadequate food or water
  - > Floods, displacement
- Impaired waste disposal/ sanitation
  - displacement, natural disasters

### Additional Effects

- Physical and psych trauma
  - Sudden catastrophic events
  - Terrorization of civilian population by military or paramilitary forces
- Overwhelmed healthcare system
  - Often inadequate at baseline

## Crude mortality rates

- Provide measure of disaster severity
- Deaths/10,000 people/day
  - Baseline CMR in developing world is 0.4-0.7
  - Rose to 34 (40-60X baseline) for Rwandan refugees in Zaire, 1994
- Can use to judge relief success

## Phases in Emergencies

#### Acute: 1st mo.—chaos, high CMR

 Rapid response teams focus on basic needs

#### Recovery: mos. 1-6—improvement

 Expanded relief efforts based on epidemiologic assessments

Rehab/development: >6mos—return to baseline, helping self

## Semantics



Humanitariar Assistance Mission



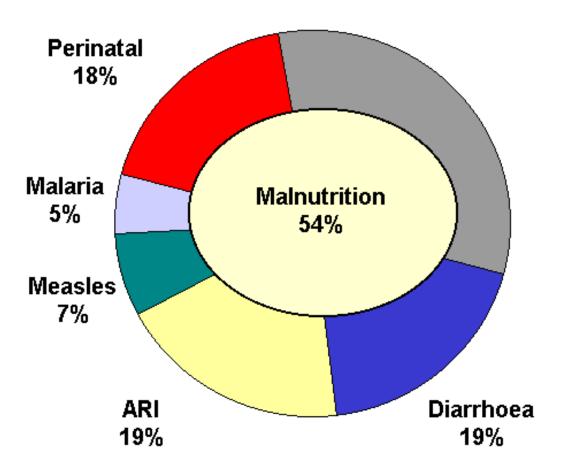
## Causes of Mortality

(children and elderly most vulnerable)

#### Death in the Developing World:

- Diarrhea & Dehydration
- Measles
- Malaria
- Acute Respiratory Infections
- Malnutrition

#### Distribution of 11.6 million deaths among children less than 5 years old in all developing countries, 1995



Other 32%

#### Percentages of deaths associated with

Acute Respiratory

Infections (ARI)

Diarrhoea.

5% Malaria

Measles:

One or more of these

diseases and/or malnutrition

19%

19%

Based on data taken from 7he Gliabal Burden of Disease, 1996, edited by Murray CJL and Lope z A D, and Epidemi diogic evidence for a potentiating effect of malnutrition on child

#### Malnutrition

- Clinical malnutrition usually results from a combination of:
  - Energy and protein deficiency
  - Micronutrient deficiency

#### Marasmus

- emaciation due to energy & protein deprivation
- Usu <age 1</p>
- Marked wt
- Stunted
- Apathy
- Hunger



### Kwashiorkor

## inadequate protein intake +/catabolism 2<sup>nd</sup> to infection

- Edema—may conceal malnutrition
- Skin & hair changes
- Hepatomeg.
- Anorexia



## Assessing nutritional status, ages 6 mos-5yrs

 Mid upper arm circumference (MUAC)

midpoint of child's upper left arm

If <13.5 cm, send for ht/wt or provide supplemental feeding

If <12 cm, sever malnutrition—need more intensive intervention

## Vitamin A deficiency

- Lack of fresh fruit, dietary fat
- Rx: mango, papaya, squash, carrots, sweet potatoes, corn
- xeropthalmia>>night blindness, corneal xerosis & ulceration, resistance to infection
- Rx: 100K U po <1yo; 200K >1yo

## Beri-beri: B1 deficiency

- fatigue, anorexia, abd pain,
  - Dry: peripheral neuritis
  - Wet: edema, CHF
- Occurs w/ diet of polished rice
- Rx: parboiled rice, whole grains, legumes, meat, fish, milk, eggs
- Thiamine 50mgX1, then 10 mg/d

## Niacin (B3) deficiency

- Pellagra—4 D's:
  - Diarrhea, Dermatitis(dark spots in sun-exp areas), Dementia, Death
- Risk: maize/low protein diet
- Rx: nuts, beans, whole grains, milk, meat, fish, eggs
- Niacin 50-100 mg/d until rash resolves

## Vitamin C deficiency

#### **Scurvy**

- Swollen, bleeding gums
- Loss of teeth
- Swollen painful joints
- Internal hemorrhage
- Need to replace fresh fruit/vegs

### Public Health Priorities

- Safe drinking water
- Human waste disposal
- Food service sanitation
- Vector control measures
- Malaria prophylaxis
- Adequate shelter
- Measles vaccination





## Joint Operations

 Integrated activity of 2 or more services (Army/Navy/AF/Marine)

Heightened importance 2nd to ±downsizing, tech advances

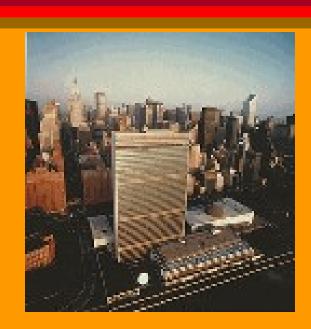
Technology also a facilitator

## **Combined Operations**

- US Forces operating with one or more allies
  - In addition to previous factors, favored w/change from Cold War to "peacekeeping" missions

## Governmental Organizations

- UN & its agencies
  - Agencies have independent funding
  - Focus often on management
  - Delegate field work to NGOs and other agencies



## UN Office for the Coordination of Humanitarian Assistance

- Provides Emergency Relief
   Coordinators to chair Inter-Agency
   Standing Committees w/ rep from
   all agencies & NGOs
- Makes sure humanitarian issues don't fall through cracks
- Field ops in multiple regions & nations

# UN High Commissioner for Refugees

- Coordinates relief in most refugee crises
- Advocate for needs of refugees and displaced persons



### UN Children's Fund

- A fund, not an agency
- provides food, safe water, medicine and shelter for displaced children
- strives to establish children's rights
- works in 161 countries, areas and territories

## **UN Development Program**



- Focuses on disaster prevention and preparedness
- Established programs for disaster management in 11 countries in 1998 alone
- coordinates disaster relief work at the local level

- Mission: attainment by all people of highest level of health
- Coordination of international health work
- Provides technical assistance & consultation to nations
- Promotes medical research & training



## FOOD AND AGRICULTURE ORGANIZATION of THE UNITED NATIONS



- Largest autonomous UN agency
- End poverty and hunger through agricultural development
- Improve nutrition & food security
- Provides direct assistance plus policy and planning advice

## World Food Program

- coordination and delivery of emergency food assistance
  - usually up to two-thirds of the world's requirements each year
  - Helped feed 89 million people in 82 countries last year
  - Focuses on most vulnerable—work children, elderly

## U.S. Agency for International Development

- Coordinates U.S. response to international humanitarian emergencies
- Office of Foreign Disaster Assistance (OFDA)
  - Branch of USAID that gets involved when ambassador or ass't sec. of state declares disaster

## EC Humanitarian Organization

 European Community's counterpart to USAID



## Non-governmental organizations (NGOs)

- Non-profit
- Work in international aid
- Receive some \$\$\$ from private sector
- Some cross borders w/o invitation, may criticize gov'ts
- May help w/longterm rebuilding

# MEDECINS SANS FRONTIERES

- World's largest largest independent international medical relief agency
- provides aid to victims of armed conflict, epidemics, natural and man-made disasters



- International group of 11 autonomous Oxfam NGOs focused on eradicating poverty
- Provides food, water and sanitation in humanitarian emergencies

## Cooperative for American Relief Everywhere

- founded after World War II to enable Americans to help the people of Europe and Asia
- Provides logistics, food aid, and camp management in humanitarian emergencies

#### Catholic Relief Services

- Provides direct aid to the poor, and tries to involve them in their own development
- Provides trucks or other transportation to deliver food to people
- Provides blankets, cooking ute seeds, etc.





- Network of local organizations provide prompt assistance in emergencies, including food, shelter, and first aid
- national Red Cross coordinates efforts with government, medical, & charity organizations for comprehensive relief



Provides food and other assistance such as blankets, clothing, and seeds, in emergencies

#### **VITA**

- Provides communications technologies in emergencies:
  - low-earth orbiting satellite
  - a series of independent short-wave packet radio systems,
  - electronic message delivery system that uses existing telephone networks



Provides assistance through local churches in both natural disasters and complex emergencies

## Save the Children.

- Provides emergency relief assistance to children and families
- coordinates with other NGOs
- Focus on education, rehab, and development of infrastructure to improve longterm food supply

## International Rescue Committee

Provides relief, protection, and resettlement services for victims of complex emergencies



#### International Committee of the Red Cross



- Mandated @ Geneva Convention
- Right & duty to cross borders in national & int'l conflicts
- All parties must agree to respect ICRC neutrality & mission for it to participate
- Monitors POW rx; brokers relief

## The military & NGOs

- NGOs serve many roles, but often rely on the military and/or the UN and its agencies for:
  - **≻**Security
  - transportation to the field or remote sites
  - **→** Communications
  - Sustaining logistical support for their own personnel

### Military Assets

- Speed: rapid deployment
- Transportation for land, air, & sea
- Security & Civil Affairs: maintain order
- Logistics: to maintain supply lines
- Command, control & communication: clear chain of command and leadership
- Engineers to rebuild infrastructure

### Military Medical Assets

- Deployable Field Hospitals
- Mobile surgical teams
- Rapid evacuation capability
- Preventive medicine teams and field laboratories—for rapid epidemiologic assessments, vector control, field and water sanitation, and disease surveillance

#### Austere environments

- Limited diagnostic capabilities
- Limited—and different—supplies
  - PCN, AMP, TTC, chloramphenicol
  - Aldomet & hydralazine
- Symptomatic relief low priority
- Triage: expectant category
- Public health of greater note

#### Cultural issues

- Neglect of female offspring
- Privacy
- Selection of interpreters
- Alternative healing practices
- Market for food and medicine

### Summary

- Differences from usual practice:
  - Colleagues and forces
  - Priorities
  - Patient population & level of nutrition
  - Spectrum of disease & illness
  - Available treatments & supplies
  - Empiricism



### Conclusions



- The military has an important role in humanitarian missions
- Proper preparation requires familiarization with many facets



